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AUTHOR Smith, Gudmund J. W.; Danielsson, Anna
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ABSTRACT

The Meta-Contrast Technique (MCT) was used to project, at the concrete perceptual level afforded by the test, two of the dilemmas confronting anxiety-ridden children: the threat against their uncertain sense of identity (revealed as fusion between the threat and the hero in the test) and the insufficiency of their defensive resources (revealed as anxiety "leaking" through the defensive structure reported by them). The subjects were 127 normal and 65 clinical children 4-16 years of age. Among reactions in the test serial subsequent to the "leaking" phase subjects showed regressions to such primitive strategies as direct denial, passive surrender and attempts to reinforce the unreliable strategy or to exchange it for a more sophisticated one. The above subgroups also differed with respect to clinical symptoms. Among children with fusion, the clinically most disturbed subgroup was even unable to mobilize any resemblance of a high-level perceptual defense. (Author)

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# ON HOW TO COMPENSATE FOR INADEQUATE EGO DEFENSES: AN EXPERIMENTAL DESCRIPTION

GUDMUND J.W. SMITH AND ANNA DANIELSSON

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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# ON HOW TO COMPENSATE FOR INADEQUATE EGO DEFENSES: AN EXPERIMENTAL DESCRIPTION

Gudmund J.W. Smith and Anna Danielsson

Lund University, Lund, Sweden

Summary: Used the Meta-Contrast Technique (MCT) to project, at the concrete perceptual level afforded by the test, two of the dilemmas confronting anxiety-ridden children: the threat against their uncertain sense of identity (revealed as fusion between the threat and the hero in the test) and the insufficiency of their defensive resources (revealed as anxiety "leaking" through the defensive structure reported by them). The subjects were 127 normal and 65 clinical children 4 - 16 years of age. Among reactions in the test serial subsequent to the "leaking" phase subjects showed regressions to such primitive strategies as direct denial, passive surrender and attempts to reinforce the unreliable strategy or to exchange it for a more sophisticated one. The above subgroups also differed with respect to clinical symptoms. Among children with fusion, the clinically most disturbed subgroup was even unable to mobilize any resemblance of a high-level perceptual defense.

In order to elucidate problems of anxiety and defense against anxiety in children and adolescents the present authors have chosen to inspect the normally very brief and "hidden" processes behind the perception of outside reality. The instrument employed for this kind of inspection has been the backward masking or meta-contrast technique (MCT, Smith et al, 1970). If the masked stimulus (A) represents e.g. a threat against the masking stimulus (B) and is presented at exposure times gradually prolonged from one pairwise exposure

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to the next, this technique enables us to learn, at the concrete level of perception,how a subject tries to defened himself in various ways against the increasing provocation from A. In other words, the MCT has been used as a test of defensive strategies (as has the Defense Mechanism Test developed by Kragh, 1969).

The succession of defensive strategies in a percept-genetic (PG) series may be regarded as a developmental continuity. It has been shown, for instance, that strategies dominating late sections of the PGs of young children may also appear in the PGs of older ones, but in the latter cases they are more likely to appear in sections at a greater distance from the level of correct perception (Smith & Nordström, 1975; cf. Kragh, 1955). In other words, as the PG approaches the end-stage primitive strategies are often discarded in favor of more mature ones. However, the definition of defenses as more or less primitive has usually been made with respect to the age and cognitive maturity of the subjects where they typically appear (Smith & Danielsson, 1977). If defensive strategies are defined either relative to a subject's own PG or to data from different age-maturity strata it will be possible to determine if a primitive strategy is substituted for a mature one from one phase of a PG to a later one. Such a shift of strategy will be termed regression.

Extensive work has also been done to characterize defensive mechanisms not only in relacion to age and maturity but also in relation to the particular personality dynamics of the subjects employing them. It has thus been shown that compulsive neurotics prefer to <u>isolate</u> the threatening percept from the perception of B, that hysterics are likely to drain the threat of all life (to "<u>decathect</u>" it), etc. In our previous work with adults we also encountered many MCT protocols where the effectiveness of various defenses seemed more than doubtful. Not until we started a systematic survey of defenses in young people, however, did the ineffectiveness of some defensive structures become a crucial issue. In many children,most often those with symptoms of severe anxiety, these structures could not mask, distort or hold back the anxiety-colored qual-

ities of perception but let them "leak through" the defensive fabric.

Perhaps the subject reports a curtain in front of the window in stimulus B where stimulus A (the threat) is being projected. This is a common form of isolating defense, but behind the curtain the observer glimpses something dark and frightening. Another subject employs a repressive form of defense implying that the threatening face A is frozen into a lifeless bust, but in the mouth of this decathected percept big canine teeth become visible. In a third case the defects of the defensive system do not directly show in the perceptual report, but by his behavior, as e.g. a sudden need for air, the subject reveals that the defense has been insufficient. Another way of showing anxiety at a behavioral rather than perceptual level is to start associating to something dangerous,disgusting or frightening.

Such cases reflect what we would like to call leaking defense mechanisms. It will soon be shown that leaking mechanisms are serious signs of the individual´s inability to come to terms with anxiety. The purpose of the present study is not mainly diagnostic. Instead we would like to study how individuals with leaking defenses handle their situation, i.e. which alternative means, if any, they choose in order to regain control. We thus plan to follow the individual´s PG starting with that phase in the tachistoscopic series of pairwise presentations where the unreliability of the defense was revealed and continuing to scrutinize the subsequent phases for possible changes in the defensive strategy. If necessary, the PG will be followed to the correct end-stage (the C-phase).

As a counter-part to the leaking mechanisms we have selected another severe anxiety signal in the PG, the presence of fusion. This term refers to phases where the threat, or someone corresponding to the A stimulus, obviously draws close to the hero in stimulus B, climbs over the window-sill in B, exchanges heads with the hero, fuses with him, is substituted for him until everything is thoroughly confused, etc. In these cases A may be represented by a threatening face, an old person, parents, and the like, but not by an object or a playmate

of the same age as the hero. As in the case of leaking mechanisms we ask how, in the process following the fusion phase, the subject manages to restore the distance between the threat and the hero or, as we like to interpret the meaning of fusion, to stave off the danger of losing his identity.

## METHOD

### The Meta-Contrast Technique (MCT)

The MCT makes possible a reconstruction of how a new percept develops within the framework of a stabilized percept, a development normally supposed to occur over micro-time.The use of a threatening or incongruent picture to initiate the development of a new percept is meant to facilitate reactions of anxiety and, as a consequence, defense against anxiety. For a detailed description of the test we refer to the Swedish manual (Smith et al, 1970) or to a recent study of children (Smith & Danielsson, 1977).

The MCT involves the tachistoscopic presentation of pairs of stimuli (A and B).Stimulus A is either incongruent with B or implies a threat directed against B. B is first presented at 0.01 sec.,then a gradually increased exposure steps until it has been correctly identified and,finally,at a standardized exposure level in a control series.Without the subject's knowledge, the experimenter thereafter introduces A immediately before B at 0.01 sec.While the exposure time of B is kept constant that of A is gradually prolonged until A+B have been correctly reported. Subjects are instructed to describe everything they see on the projection screen.In the first MCT series,A is a car and B a living-room;in the second series,A is a threatening face and B a room with a window and a boy (girl) sitting at a desk.

The following main scoring categories will be considered here (a few more marginal categories being deferred to their proper context below).

Severe anxiety

Zero phases: at least two reports where nothing or only a chaos is perceived by the subject.

Fusion: as described in the introduction, with particular

caution against possible misunderstandings of the child's use of words.

Leaking mechanisms: as described in the introduction,with a differentiation made between anxiety revealed as part of the peceptual structure and anxiety noted in the subject's behavior or thinking.

Fright, etc: the child reports that it is frightened by the stimulation or reveals open anxiety in other ways (in children not too young for internalized reactions).

Hero disappears: The child points out that the hero in B has left the room, has disappeared, etc.

Less severe anxiety

Black structures are added to the stimuli or being unusually emphasized in the report.

The validity of the signs of anxiety has been proved in many previous investigations (Smith & Nordström, 1975; Smith et al, 1976; Smith & Danielsson, 1977) but will be demonstrated once more below.

Primitive defenses

Eye-shutting behavior: the child shuts its eyes when presented with the stimulation - as if to shield itself or stave off the danger.

Sleep behavior: the child yawns, talks about sleep, etc.

Denial: the child denies the existence of A in a rather undifferentiated and blunt way ("no", "it's not there any more", "I cannot see the man").

The above three signs were typical of immature pre-school children in a normal sample (Smith & Danielsson, 1977).

Phobic repression

The threat is decathected. While stimulus-proximal revisions of A (a bust, a mask) are counted as primitive-hysteric signs, such stimulus-distant changes as objects, harmless animals and trees have been treated as phobic. The validity of this sign has been proved before but will be tried again below.

Isolation/negation

The child reports concealing surfaces or white fields instead of A or negates A's threatening character. For the validation of this sign as typical of obsessive-compulsive neurosis see Smith et al. (1970, 1976).

The scoring of MCT protocols was done independently of the rating of clinical symptoms (see below). The independence of the scoring procedure is also attested by the high inter-rater reliability for previous trained raters (cf. Almgren, 1971) as well as for the present ones.

## The Afterimage (AI) Test

In the AI test the individual is confronted with a phenomenon the origin of which is unknown to him, it being neither clearly part of the self nor of outside physical reality. He is asked to come to terms with this phenomenon in various ways in a series of consecutive trials. Since the AI method has been presented in detail many times before (e.g. Smith & Danielsson, 1977) and since only part of the data are going to be exploited here the test description will be abbreviated.

The AI apparatus consisted of a semi-transparent movable screen. Two markers at the front of the screen were used by the subject to measure the width of the AI. The stimulus, projected from behind the screen, was a relatively intense red schematic face 5.5 cm wide. The subject fixated it for 20 sec, in order subsequently to project an AI on the screen. The fixation distance was 39 cm and the projection distance 59 cm. The expected "Emmert" size of the AI was thus 8.3 cm. Besides measuring AI size the subject described its color. In order to extinguish the AI, a diffuse red light was exposed for 5 sec after each trial. Ten trials were used. The time required per trial was about 70 sec.

Two scoring categories will be considered here:

Regressive instability: changes from normal AIs to childish ones, i.e. from a size of $\geq$8.0 cm to a size of $\leq$6.5 cm, from negative to positive color, or from an AI reflecting the form and meaning of the stimulus to an AI with a different, more concrete or physiognomic form and meaning. These changes may

occur from one trial to a later one (not more than 2 trials intervening) or within one and the same trial. Only in cases where the initial phase of the series is normal and no phases intervene between the normal and the primitive phase should regressions be considered as true signs of psychotic discontinuity. Two of the subjects in this study have such regressions.

Primitive series: all AIs in the series are ≤6.5 cm, or all AIs are positive, or some AIs are positive and the rest achromatic. The more cognitively mature a subject the less likely he is to have thoroughly primitive AIs.

These two sign categories have been validated in previous investigations (Andersson et al., 1972; Smith & Nordström,1975; Smith & Danielsson, 1977).

## The Landscape Test

This cognitive task (Piaget & Inhelder, 1941, 1956) was used to estimate the degree of egocentric thinking in the school children. Groups 7-8 and 9-11 years of age were divided in more egocentric or immature subjects, on the one hand, and less ego-centric or mature ones, on the other (for details about this procedure, see Smith & Danielsson, 1977). The 11-year-olds who made no errors were included among the 12-13-year-olds. In this age group and among the 14-16-year-olds a few subjects made one or more errors and were therefore considered as cognitively immature.

## Clinical symptoms

The clinical children were rated with respect to the presence or absence of a number of symptoms. This rating relied on information from members of the clinical staff and was performed independently of the test scoring. In our disposition of anxiety dimensions we have relied on, among others, Anthony (1975). The following dimensions concern us here:

### General anxiety scale

Paroxysmal anxiety: acute attacks of anxiety, panic,other sudden and uncontrollable outbreaks, feelings of oncoming disaster. [Even slightly uncertain symptoms were considered here].

Chronic anxiety: chronic states with high tension, several somatic symptoms or particularly severe symptoms such as persistent refusals of food, vomiting, etc., anticipation of something unpleasant or other apprehension or "worries".

Focussed anxiety: unnecessary fear of particular persons or situations (including phobias as well as as pseudo-phobias).

More diffuse anxiety reactions: minor somatic symptoms such as sleep disturbances, enuresis, nail biting, clawing, stomach upsets, headaches, etc.

Specific ratings

Phobic anxiety: fear of harmless animals, rooms, places, objects, etc., i.e., fear of the present, not of the absent (Bowlby, 1973).

Different reactions when frightened: flight - freezing - attack - crying.

A generally passive attitude and denial of one's own anxiety were also rated.

## SUBJECTS

The normal group had an age range of 4-5 years. Subjects were selected in such a way as to make all age levels comparable with respect to sex and social background. There were 72 school children (7-15) and 55 pre-school children (see also Table 1).

Subjects in the clinical group ranged from 4-16 years of age. There were 57 school children and 8 pre-school children. Subjects were primarily selected because of symptoms of anxiety. All in all the social background of these children was less academic than that of the normals. However, the balance with respect to cognitive maturity was approximately the same as in the normal group. While there were 6 immature children among a total of 33 in age groups (11)12-16 years (none in the normal group) there were only 9 out of a total of 24 in age groups 7-10(11) (even distribution in the normal group).

Let us first present some validation data for leaking mechanisms, fusion and other signs of severe anxiety, and for a sign of more moderate anxiety, dark structures. Table 1 re-

Table 1

veals a clear difference between the clinical and normal groups with respect to the frequency of signs of severe anxiety. Fusion appears to be more typical of the young children and leaking mechanisms of the older ones. One of the signs, "hero missing", is not uncommon among young pre-school children and should be handled with some caution as a sign of severe anxiety in these age groups. As expected, even such a strong sign as fright loses some of its power at the pre-school level.

Table 2 compares the number of scored anxiety dimensions with different levels of anxiety in the clinical group of school children. Signs of severe anxiety clearly differentiate the clinically defined anxiety groups whereas dark structures seem to differentiate between clinical and normal subjects in a more general way.

## DESCRIPTION OF SUBJECTS WITH LEAKING MECHANISMS

There were 25 subjects with leaking mechanisms. Considering the PG subsequent to the leaking phase the subjects could be conveniently divided in the following subgroups.

Regression: After the leaking phase the subject resorts to a more primitive defense, i.e., a defense typical of normal pre-school children. The subgroup encompasses 6 patients, all of them at school age. In 5 of them the leaking mechanism is of a compulsive type (isolation with a curtain, white surfaces, etc., in the window, or a denial-negation fraught with obvious compulsive qualities) and in the remaining patient, of a phobic-repressive type. Five subjects resort to eye-shutting behavior after the leaking phase, one subject applies a perceptual structure previously used in the first MCT series (regression).

C-phase-after: The leaking phase leads to a correct report of A without intervening incorrect reports. Among the 7 patients in this group (6 of them school children) 1 has a leaking compulsive defense, 1 hero duplication (the threat perceived as a playmate of the hero's),4 phobic repression and 1 a leaking stimulus-proximal repression.However,in 5 of these subjects the correct report is accompanied by attempts to walk away, to seek refuge with the experimenter, by evasive talk, great yawns or removal of the hero in B.

Reinforcement, or reinforcement with regression: After the leaking phase the subject repeats the same defense, but with more emphasis. Four patients belong to the pure reinforcement subgroup, 2 to the mixed subgroup. Five of them are school children. In 1 patient the leaking mechanism was hero duplication (strengthened by making the duplicate a twin of the hero's) and in the other 5 more or less vaguely structured patterns (e.g. something in-between a hippie and a dog changing to a statue, or a cracked window later supplied with an extra pane).

Non-regressive change: After the leaking phase the subject changes to another mechanism, but not a primitive one. Among 6 patients in this group (all school children) 1 changes from leaking hero duplication to phobic repression, 2 from phobic repression to isolation or reaction-formation (A reported as looking benevolent) and 3 from stimulus-proximal repression to isolation or isolation plus reaction-formation.

## FURTHER CHARACTERIZATION OF THE LEAKING SUBGROUPS

In order to classify our subjects with respect to cognitive maturity we took into account the following signs of immaturity: pre-school age, an "immature" result on the Landscape Test relative to one's (school) age and primitive AIs. A few subjects who could not or who refused to produce AIs belong to the pre-school group anyway.

Considering the regression group, in particular, we also wanted to tabulate our subjects with respect to regressive instability in the AI series. Only series that were intact (with

at least 8 measurements) were inspected. Upon finding (see below) that not only the regression group but also the C-phase-after group were characterized by AI instability we also wanted to differentiate these very groups by means of clinical ratings. The choice of phobic symptoms as one rating category was self-evident in view of the many phobic mechanisms found in the MCT protocols of the C-phase-after group. The dimensions of passivity and attacking behavior were primarily chosen with regard to the contrasting primitive MCT defenses of the groups, passive sleepiness versus more direct warding-off.

Reinforcement: Acording to Table 3, 5 of 6 patients in this subgroup have at least one sign of cognitive immaturity. It also deserves to be mentioned that in 3 of them anxiety was noticed, not on the perceptual but on the behavioral level.

Table 3

Non-regressive change: There are no signs of immaturity in this group of 6 patients. In all of them anxiety is scored on the perceptual level.

The above groups are placed at the upper and lower ends of the maturity scale and differ significantly from each other in that respect ($P = 0.004$, Fisher's exact test, two-sided).

Regression: 5 of the 6 patients are scored for instability in the AI test. It has already been shown that after the leaking phase their MCT protocols are characterized by primitive defense strategies; considering the entire protocols we find 5 patients with eye-shutting behavior and 2 with blunt denials. Only 1 child shows sleep behavior. Attacking behavior when frightened is noted by the clinicians in 5 of them (Table 4).

Table 4

C-phase-after: 4 of the 5 patients with AI series that are intact are scored for instability. The primitive defense of eye-shutting is, however, not usually available to them (3 of 7) nor do they show denial (0 of 7). W have already noted

a number of passive-evasive reactions after the leaking phase. It is not surprising, then, to find that 5 subjects show sleep behavior in their protocols; a 6th subject mentioned before lets the hero disappear from the picture. Clinically, 4 of them are described as phobic and 6 as passive.

First of all we would like to test the difference between the last two groups, on the one hand, and the rest of the leaking patients, on the other, with respect to regressive instability in the AI test. As revealed by Table 4 - where only series that are intact are noted - 9 of 11 children in the first-mentioned groups are scored for such regression but only 1 of 10 in the other groups was so scored (P = 0.003, Fisher's exact test, two-sided).

Eye-shutting and/or denial but no sleep signs are typical of 5 children in the regression group against 0 in the C-phase-after group (P = 0.01, Fisher's, two-sided). One phobic MCT score in the regression group against 7 in the C-phase-after yields the same P value. The contrast with respect to phobic symptoms is not significant. However, there are only 5 children altogether with clear phobic symptoms in the entire group of 25, 4 of them in the subgroup C phase-after (P = 0.025, Fisher's, two-sided).

## DESCRIPTION OF SUBJECTS WITH FUSION

As shown in Table 5, 15 protocols were scored for fusion. The group as a whole is relatively immature: most of the preschool children are there as well as most of the cognitively immature school children, and many children with thoroughly primitive AIs. This trend was expected since fusion or the threat of fusion must be a more typical sign of danger in subjects with a less established sense of self than in older and cognitively-emotionally more established subjects - who would not allow fusion to happen.

Table 5

It seems more difficult to divide the fusion group into subgroups than to divide up the group with leaking mechanisms. One obvious reason is the smaller size of the group. However, one possible sub-division immediately catches the eye: one subgroup where, after the fusion phase, the subjects try to structure some sort of defense on the perceptual level, even a leaking defense, and the other subjects where the PG continues directly into a C-phase, into zero phases, phases expressing open anxiety, impairment of the perceptual structure, sleep behavior, repeated denials, etc.

When trying to characterize these two subgroups clinically we focussed primarily on the children's way of reacting when frightened. The group without any defensive attempts ought to be more resigned, more inclined to flee and less capable of understanding themselves (of admitting their own anxiety), while the other group ought to stand up better to reality.

Some perceptual defense structure: 3 of 6 patients are immature according to our criteria.

No sophisticated defense: 7 of 9 patients are immature. As shown in Table 5 most of them are scored for the characteristics chosen to distinguish between the two subgroups: freezing, flight, crying and denial of their own anxiety.

There is a significant difference between the two subgroups with respect to freezing ($P = 0.012$, Fisher's exact test, two-sided). If we consider the clinical signs 2-5 in Table 5 together, everyone in the defense subgroup has less than two and everyone in the other subgroup two or more ($P < 0.002$, Mann-Whitney, two-sided).

## DISCUSSION

The present study was motivated by observations made during our attempts to operationally define anxiety and defense against anxiety using the MCT. These observations, as formulated in perceptual terms, implied that the defensive structures in children often appeared to be "leaking" anxiety. Our impressions agree well with clinical findings. Anna Freud (1970), comparing children and adults, writes that children's

"defensive moves against anxiety (are) more often incomplete, i.e. partly unsuccessful" (p.177). Such conclusions may be taken as an indirect validation of our test signs. However, we also tried to ascertain their validity by directly comparing the clinical group with a normal one and by dividing the former into strata defined by the severity of anxiety. The top stratum referred to so-called paroxysmal anxiety and the lowest stratum to diffuse anxiety reactions. Paroxysmal anxyety is considered by Cameron (1963) as a regression to primary anxiety, i.e. an irresistable need to discharge tension under any stress. Signs of leaking defense were most closely related to paroxysmal anxiety and to chronic anxiety, the stratum just below.

In the validation study we also included a number of other anxiety signs. Of special interest among these signs was the so-called fusion of the threat and the hero. Fusion seems to reflect problems which are partly different from those reflected by the leaking defenses, problems less related to specific categories of defense and more generally bound to violations of the identity and basic security of the child. It was, therefore, not surprising to find that signs of fusion were most typical of young and/or cognitively immature subjects. As far as both fusion and leaking mechanisms are concerned our attention was mainly directed to how the individual managed to organize his defense in PG phases subsequent to the one where fusion or leaking mechanisms appeared, i.e. where the defense proved to be inefficient.

Before discussing the results in more detail we would like to dwell briefly on the question of a defensive hierarchy as viewed in a developmental perspective. In the introduction we described how defensive regression could be operationally defined in the MCT: either in relation to the individual's own PG or in relation to MCT results obtained with children at various age and maturity levels. It may be noted that our findings agree well with most clinical findings where, for instance, denial is referred to a very low, narcissistic level of maturity and isolation, repression and reaction-formation to a higher, neurotic level (Vaillant, 1971; cf. also A. Freud, 1937;

Symonds, 1945; Fenichel, 1945; Bibring et al, 1961; Cameron, 1963; Kolb, 1968). As regards the relation between such more "advanced" strategies as isolation and repression we follow A. Freud (1970) and others and consider repression as the less mature form. Defensive strategies as defined by the MCT might then very well be ranked in the following way starting from the narcisstic strategies at the bottom: eye-shutting/primitive denial, hero duplication (a strategy which still shows narcissistic qualities), primitive repression, phobic repression, isolation-negation/reaction-formation.

## Leaking defense mechanisms

These mechanisms were relatively easy to define and to spot in the protocols. Where exactly to draw the line between leaking and non-leaking mechanisms will, naturally, always remain a matter of personal taste. The subgroups tended to merge with each other in some cases as shown in the presentation of the results. With more cases available a more nuanced classification would have been possible. On the whole, however, the subgrouping served its purpose.

Let us first note the cleavage between the two unstable and the two stable subgroups. Regressive instability was defined with respect to the AI test and implied that immature AIs suddenly appeared among more mature ones. A series of projected AIs may seem a rather narrow and artificial base on which to build a clinical differentiation. However, regressions have proved to be valid and reliable signs of a subject's inclination to oscillate between more and less mature forms of adaptation to reality (cf. Smith et al, 1972). Moreover, knowing the difference between children and adults with respect to AI size and color, regressive instability can easily be defined in operational terms.

The two AI-stable subgroups seem to be able in MCT to replace their leaking mechanisms with more powerful ones, without recourse to regression, but differ with regard to age-maturity. The non-regressive-change subgroup chooses more sophisticated strategies going from hero duplication to phobic repression and from repression to isolation or reaction-formation. In the

reinforcement subgroup the same type of defense is tried once again, but the second time more emphatically than in the leaking phase where the attempt was often vague and uncertain. The relative immaturity of these children may explain the lack of "finality" of their defensive strategies as well as their readiness to repeat them in spite of the first failure.

The two AI-unstable subgroups differ with respect to the kind of primitive defenses available in their PGs. After the leaking phase, the regression subgroup falls back on primitive eye-shutting or, in a few cases, denial. Instead, the C-phase-after subgroup seems inclined to surrender in a passive manner, to withdraw in sleepiness or to flee with a disappearing hero in the B-percept. In this latter group the most common MCT mechanisms were phobic, i.e., mechanisms basically implying displacement and avoidance. The regression subgroup tended to have more compulsive patterns of defense. It did not regress half-way after the leakage but all the way to a primitive and probably less demanding level of functioning. The kind of primitive strategy scored in the protocols of isolating-negating subjects, on the one hand, and phobic subjects, on the other, may indicate something about possible precursors of these defense mechanisms.

## Fusion

Identification of this sign category may have been a trifle more difficult than the identification of leaking mechanisms because children with fusion were generally younger and/or cognitively more immature and, therefore, apt to use a more cryptic language. Even with respect to fusion, however, agreement between the judges of the protocols was practically complete.

It was assumed from the beginning that fusion would be a rather severe sign of anxiety, particularly in young and immature children. Fusion between the hero and the threat obviously implies invasion of the child's person. One important aspect of cognitive and emotional development is a growing autonomy of the individual vis á vis the world around him. As long as the differentiation between "self" and "other" remains

vague or confused the appearence of an unknown "other" is more likely to be perceived as an intrusion of the "self" and, therefore, as a potential danger to the child's identity. This assumption seemed to be confirmed by Table 1 even if the number of subjects was somewhat too small to allow any definite conclusions.

The difference between the two subgroups is interesting and revealing. It appears that children lacking high-level defensive alternatives to use in a counter-thrust against fusion are more disturbed than children who can mobilize at least some repressive or isolating attempt, however insufficient. Apparently, the mere indication that inner defensive strategies have started to supersede the primitive, direct ones is an important sign of the maturing ego, i.e. of the child's ability to define his own self as something distinct from the outside world and to integrate this feeling of identity with his emotional and cognitive experiences.

## Conclusion

The main purpose of the present paper was to project, at the concrete perceptual level afforded by the Meta-Contrast Technique, something of the dilemmas characterizing anxiety-ridden children and adolescents: the threat against their uncertain sense of identity and the insufficiency of their defensive resources. At the same time we wanted to find out how different children try to resolve these dilemmas. It has been possible to operationally define one prerequisite for defensive regression to low-level strategies, i.e. the leakage of high-level mechanisms, and also to pinpoint, as we assume, one of the crucial obstacles to a child's normal emotional growth, its vulnerability to invasions into the "self region" of experience.

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Table 1.

Signs of severe anxiety in the clinical and normal groups.

| MCT signs of anxiety over age groups | Clinical group: Paroxysmal or chronic anxiety | | Clinical group: The rest | | Clinical group: All clinical subjects | | Normal group | |
|---|---|---|---|---|---|---|---|---|
| | scored | not | scored | not | scored | not | scored | not |
| Zero phases | | | | | | | | |
| (11)12-16 | 5 | 16 | 0 | 12 | 5 | 28 | 0 | 36 |
| 7-10(11) | 2 | 10 | 1 | 11 | 3 | 21 | 1 | 35 |
| <7 | 1 | 4 | 0 | 3 | 1 | 7 | 9 | 46 |
| Fusion | | | | | | | | |
| (11)12-16 | 5 | 16 | 2 | 10 | 7 | 26 | 0 | 36 |
| 7-10(11) | 1 | 11 | 3 | 9 | 4 | 20 | 2 | 34 |
| <7 | 3 | 2 | 1 | 2 | 4 | 4 | 8 | 47 |
| Leakage | | | | | | | | |
| (11)12-16 | 9 | 12 | 5 | 7 | 14 | 19 | 3 | 33 |
| 7-10(11) | 6 | 6 | 1 | 11 | 7 | 17 | 5 | 31 |
| <7 | 1 | 4 | 2 | 1 | 3 | 5 | 6 | 49 |
| Fright | | | | | | | | |
| (11)12-16 | 7 | 14 | 1 | 11 | 8 | 25 | 0 | 36 |
| 7-10(11) | 4 | 8 | 0 | 12 | 4 | 20 | 0 | 36 |
| <7 | 2 | 3 | 1 | 2 | 3 | 5 | 9 | 46 |
| Hero disapp. | | | | | | | | |
| (11)12-16 | 5 | 16 | 2 | 10 | 7 | 26 | 0 | 36 |
| 7-10(11) | 4 | 8 | 2 | 10 | 6 | 18 | 0 | 39 |
| <7 | 1 | 4 | 2 | 1 | 3 | 5 | 13 | 42 |
| Presence of sign | | | | | | | | |
| (11)12-16 | 16 | 5 | 7 | 5 | 23 | 10 | 3 | 33 |
| 7-10(11) | 10 | 2 | 6 | 6 | 16 | 8 | 11 | 25 |
| <7 | 4 | 1 | 3 | 0 | 7 | 1 | 27 | 28 |

Table 2

Correlation between anxiety signs in MCT and anxiety symptoms in the clinical school children.

| Symptom group | Number of severe anxiety dimensions scored | | | | Black structures | |
|---|---|---|---|---|---|---|
| | ≥3 | 2 | 1 | 0 | + | - |
| Paroxysmal anx. | 3 | 3 | 3 | 1 | 7 | 3 |
| Chronic anx. | 5 | 3 | 11 | 6 | 14 | 11 |
| Focussed anx. | 1 | 1 | 5 | 6 | 11 | 2 |
| The rest | 0 | 1 | 6 | 5 | 7 | 5 |
| (Normals) | | | | | (26) | (46) |

Table 3

Maturity criteria in the various subgroups.

| | N | 1 Anx.on beh. level | 2 Pre-school ch. | 3 Cogn.imm. school ch. | 4 Prim. AIs | Some sign 2-4 | No sign 2-4 |
|---|---|---|---|---|---|---|---|
| Non-regressive change | 6 | 0 | 0 | 0 | 0 | 0 | 6 |
| Reinforcement | 6 | 3 | 1 | 1 | 4 | 5 | 1 |
| C-phase after | 7 | 2 | 1 | 1 | 1 | 2 | 5 |
| Regression | 6 | 1 | 0 | 2 | 1 | 3 | 3 |
| All with leakage, no fusion | 17 | 3 | 1 | 1 | 3 | 5 | 12 |
| All with fusion, no leakage | 7 | - | 3 | 0 | 2 | 5 | 2 |

Table 4

Description of the subgroups "Regression" and "C-phase after"

| Test | AI complete series | MCT | | | | | | | | | | Behavior | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | | 2 | | 3 | | | | | | | | | | | |
| Group | Regr. instab. | Eye shutting | | Denial | | Sleep | | ½ not 3 | | Phobic repr. | | Attacking | | Passive | | Phobic | |
| | + - | + | - | + | - | + | - | + | - | + | - | + | - | + | - | + | - |
| Regression | 5 1 | 5 | 1 | 2 | 4 | 1 | 5 | 5 | 1 | 1 | 5 | 5 | 1 | 2 | 4 | 1 | 5 |
| C-phase after | 4 1 | 3 | 4 | 0 | 7 | 5 | 2 | 0 | 7 | 7 | 0 | 3 | 4 | 6 | 1 | 4 | 3 |
| [The rest] | [1] | [9] | | | | | | | | | | | | | | | |

Table 5

Description of the fusion subgroups

| Group | 1 Imm.-signs | | 2 Crying | | 3 Fleeing | | 4 Freezing | | 5 Denying anx. | | Σ 2 - 5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | + | - | + | - | + | - | + | - | + | - | ≥2 | <2 |
| Defensive structuring after fusion | 3 | 3 | 2 | 4 | 1 | 5 | 0 | 6 | 2 | 4 | 0 | 6 |
| No defensive structuring | 7 | 2 | 7 | 2 | 6 | 3 | 7 | 2 | 5 | 4 | 9 | 0 |